American Association of State Geologists

Missouri Department of Natural Resources

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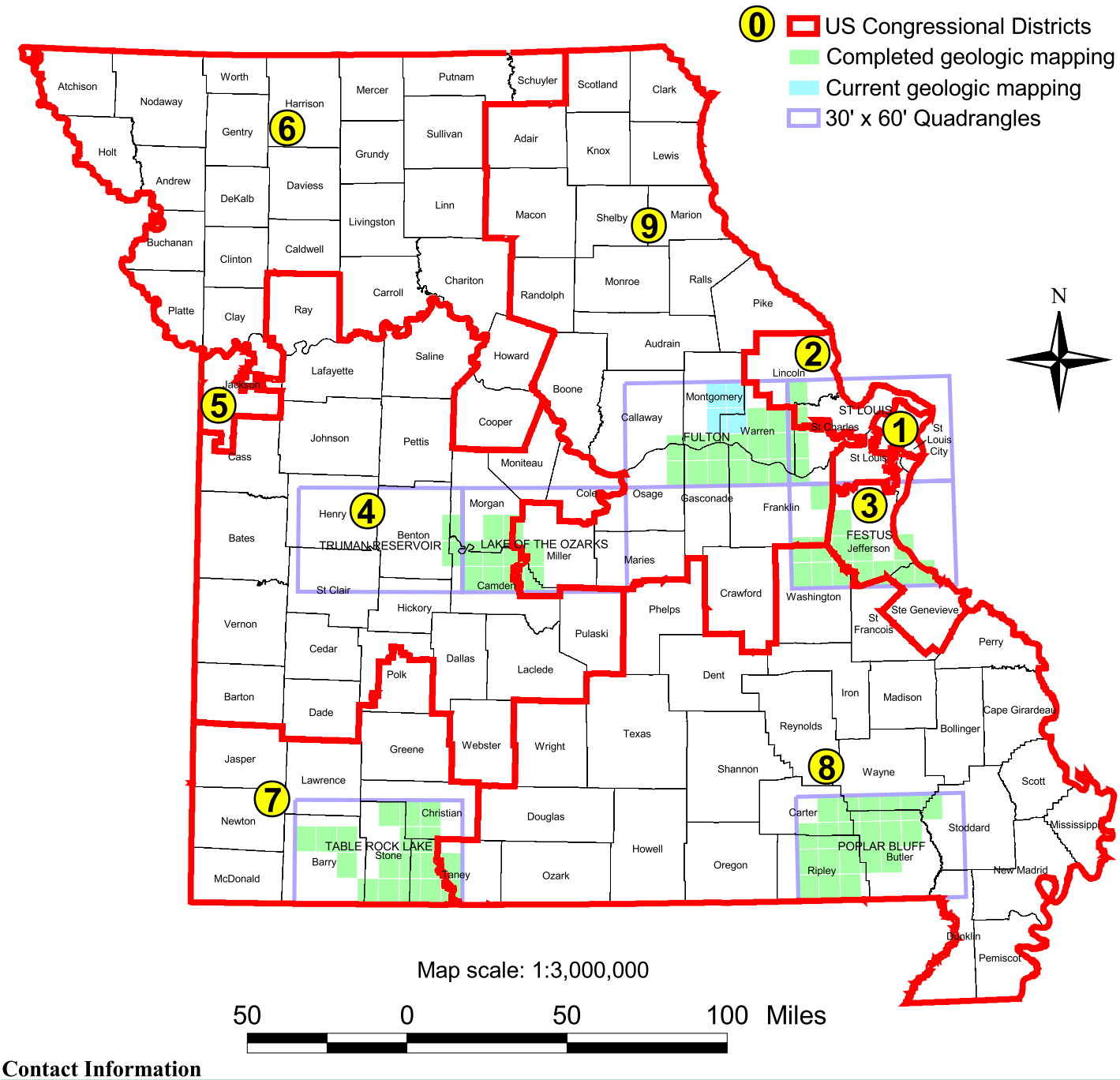
National Cooperative Geologic Mapping Program

STATEMAP Component: States compete for federal matching funds for geologic mapping

MISSOURI



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STATUS OF STATEMAP GEOLOGIC MAPPING PROGRAM IN MISSOURI – DECEMBER 2004

Year	Project Title	Federal Dollars	State Dollars	Project Dollars
93-98	**Table Rock Lake Mapping Project**: Purdy, McDowell, Lampe, Table Rock Dam, Viola, Garber, Reeds Spring, Branson, Hollister, Mincy, Forsyth, Shell Knob, Day, Highlandville, Hurley, Jenkins, Selmore & Spokane 7.5' quads	$ 319,395	$ 320,069	$ 639,464
98-99	**Poplar Bluff Mapping Project**: Briar, Doniphan North, Doniphan South, Ellsinore, Grandin, Grandin Southwest, Hogan Hollow, Hunter & Poynor 7.5' quads **Table Rock Lake, Missouri, 30' x 60' quad compilation**	100,000	100,001	200,001
99-00	**Poplar Bluff Mapping Project**: Fairdealing, Flatwoods, Harviell, Hendrickson, Oxly, Poplar Bluff, Puxico, Rombauer, Stringtown, Wappapello & Williamsville 7.5' quads	102,545	139,224	241,769
00-01	**Festus Mapping Project**: Bloomsdale, Danby, De Soto, Fletcher, Halifax, Old Mines, Richwoods, Selma, Tiff & Vineland 7.5' quads **Springfield, Missouri, 30' x 60' quad compilation**	130,624	130,626	261,250
01-02	**Festus Mapping Project**: Cedar Hill, Cyclone Hollow, Ebo & Gray Summit 7.5' quads **Lake of the Ozarks Mapping Project**: Bagnell, Barnumton, Bollinger Creek, Camdenton, Green Bay Terrace, Lake Ozark, Sunrise Beach & Toronto 7.5' quads **Festus Digitizing Project**: Belew Creek, Festus, Herculaneum, House Springs, Lonedell, Maxville, Moselle, Oakville, Pacific, St. Clair & Valmeyer 7.5' quads (Supplemental projects are included in funding amounts)	177,608	164,608	342,216
02-03	**Fulton Mapping Project**: Berger, Dissen, Fredicksburg, Gasconade, Hermann, Marthasville, Morrison, New Haven, Pershing, Swiss, Treloar & Washington West 7.5' quads **Lake of the Ozarks Mapping Project**: Boylers Mill, Gravois Mills, Knobby & Rocky Mount 7.5' quads	227,313	227,313	454,626
03-04	**Fulton Mapping Project** (bedrock & surficial material with drilling assistance): Foristell, New Melle, Troy, Washington East, Warrenton & Wright City 7.5' quads (Supplemental projects are included in funding amounts)	255,220	272,070	527,290
04-05	**Fulton Mapping Project** (bedrock and surficial material with drilling assistance): Bellflower South, Hawk Point, Jonesburg, New Florence, Pinnacle Lake & Warrenton Northeast 7.5' quads	189,977	189,977	379,954
	TOTALS	$1,502,682	$1,543,888	$3,046,570

The Missouri Geological Survey and Resource Assessment Division (GSRAD) is an active participant in the STATEMAP component of the National Cooperative Geologic Mapping Program, having participated since STATEMAP's inception in 1993. Missouri recognizes the importance of geologic mapping as a tool for land-use planners, emergency-management officials, developers, environmental agencies, mining companies, water-well drillers, and many others who have need to understand the nature, composition, and distribution of earth materials.

Several areas of rural Missouri have undergone rapid growth in recent years. The unique beauty of the Ozarks has drawn thousands of tourists and new homeowners to the Branson, Springfield and Lake of the Ozarks regions. The rapid development in these areas taxes natural resources and potentially impacts environmental quality. This has created a need for accurate geological information, and the State has responded by targeting geologic mapping efforts in these areas. The mapping identifies geologically sensitive areas, such as karst areas that could be particularly susceptible to groundwater contamination. Geologic mapping also identifies areas of high-quality groundwater resources to guide the installation of water wells and identifies potential mineral and aggregate resources to support economic development.

Geologic mapping has also been focused in portions of southeast Missouri where geologic hazards are associated with the New Madrid Seismic Zone. Accurate geologic information is an essential tool in the preparation of earthquake-risk maps for use in the proper siting of new buildings, bridges, waste-disposal facilities, and dams. Mapping in both the Poplar Bluff and Festus areas has been completed to optimize safe growth and minimize risks from sinkhole collapse, liquifaction, and landslides associated with earthquake hazards. Current mapping on the Fulton project area west of St. Louis also targets areas susceptible to geologic hazards and rapid population growth.

Since Missouri began its participation in the STATEMAP program, it has completed 82 bedrock and 72 surficial material maps at a scale of 1:24,000. During its twelve-year involvement in the STATEMAP program, Missouri has received $1,558,920 in Federal dollars that were matched with additional State funds. With continued cooperative effort between the United States Geological Survey and the Missouri Department of Natural Resources, the state will have reliable geologic mapping information to assist decision makers with difficult resource choices and planning efforts.

As of September 2004, Missouri began mapping on six, 7.5' quadrangle map areas on the Fulton Mapping Project in Lincoln, Montgomery and Warren counties. Bedrock geologic mapping will be assigned to four quadrangles and surficial material drilling will be done on those four and two others.